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The Role of Construction and Financial Sectors for Economic Growth in Indonesia

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Economic growth is often measured based on the output (GDP) in a country. Economic growth will continue to be stimulated supported by export and import activities. This situation will succeed with the existence of economic activities consisting of the main sectors, namely agriculture, industry and services. That in fact, the role and contribution to this subsector cannot be denied creating a stable and sturdy economic situation. This study aims to examine the short and long-term relationship of the construction, financial and infrastructure sectors with economic growth in Indonesia, with data used from 1985-2017. This study is carried out by applying the VAR test and Johansen's co-integration test, which aims to examine the short-term and long-term relationship between each economic subsector and economic growth. Then the variance decomposition analysis method is used, which aims to analyse the surprise factors resulting from the construction, infrastructure and financial subsector on economic growth. The results showed a positive long-term and short-term relationship with economic growth. Furthermore, the results of the study also showed that the construction, financial and infrastructure sectors contributed significantly to economic growth in the long run. The implication of the results of this study is that in order to achieve established economic growth, the conducive economic subsector is needed.

Key words: *Economic growth, Construction, Financial Economics, Infrastructure, Vector Error Correction Model.*

JEL Classification *C32, G20, H54, L74, O4.*

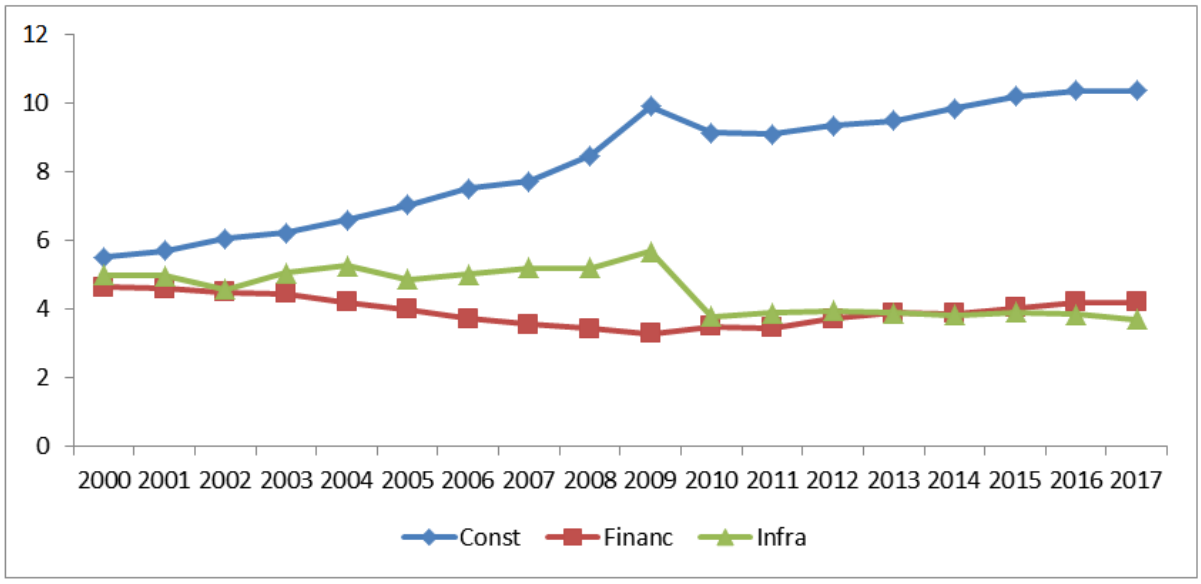
Introduction

The agriculture and mining sectors are the biggest contributors to the economic sector of GDP, especially absorbing the number of workers. Indonesia's GDP growth in 2001 to 2005 increased and stabilised, from 3.6% to 5.7%. In the agricultural sector with economic activities that produced the largest percentage of economic growth, amounting to 4.8% in 2008 and 4.6% in 2012. However, with the economic crisis that struck Asian countries in 1985/1986, Indonesia experienced a decline in growth of 2. 5% in 1985. In 1986, the State's economy recovered through several policies and steps taken to overcome them. These policy measures resulted in an economic growth rate that had risen by 5.9% to 7.8% in 1996. However, despite this extraordinary economic growth, Indonesia was not ready to face the financial crisis that occurred in July 1997 – at that time the growth rate of the economy experienced a decline of 13.1% in 1998. But during the economic crisis, Indonesia managed to overcome it by 2004 with an economic growth rate of 5.1%, and GDP growth increased again by 6.3% in 2007.

Figure 1 illustrates the contribution of the construction sector to GDP has increased, by 5.5% in 2000 to 9.9% in 2009. This shows that the sector is growing fast although it did not last long enough. But in 2010-2011, this contribution sector experienced a decrease of around 9.1%, due to the influence of the economic crisis that occurred. Through a number of macroeconomic policies and measures that were handled efficiently, the sector again experienced an increase of 9.3% of GDP in 2013. This increase continued until 2017, with an average increase of 10.4% of GDP.

The contribution of the financial sector to GDP in 2000 only recorded 4.6%. In 2002-2009 there was an average decline of 3.9%. This decrease was caused by the financial sector occurring with a number of government policies with the aim of restoring this sector, especially the construction and infrastructure sectors that experienced the earthquake disaster at that time. But in the meantime, the financial sector continued to make improvements, so that in 2010-2017 it experienced an annual increase of an average of 3.8%.

Figure 1: Relationship between variables of construction, finance and infrastructure with economic growth.



Sources: Asian Development Bank

The contribution of the infrastructure sector shows a trend that is more or less the same as the construction sector and the financial sector, where developments are seen increasing and decreasing the GDP ratio. In 2000, the growth of the infrastructure sector accounted for almost 4.9%. Five years later, this sector grew with an average contribution of 5.1% in 2005-2009. However, around 2010, the contribution of this sector to GDP showed a decline of 3.8%, due to infrastructure improvements caused by the crisis in Indonesia. However, in 2012 this sector experienced an increase with its contribution reaching 4.0% of economic growth. But in 2013-2014 it also decreased by an average of 3.9%. Furthermore, there was a significant increase in 2015-2017 with an average increase of 4.07%. On this basis the Indonesian economy in the medium term also faces the constraints of developing complementary elements of production that hinder economic development and higher quality, especially in the fields of infrastructure, applied science, and Pillar Innovation (Label Competitiveness Report 2011-2012).

In 2004 and 2007, Indonesia was struck by a tsunami that began with the Indian Ocean earthquake. The impact of this disaster indirectly caused the service and tourism sectors to decline with a growth rate of around 5.8%. However, after 2007, there was an increase in the infrastructure sector by 7.3% and 7.8% in 2010. If we look at the portrait of the State Revenue and Expenditure Plan (RAPBN) for the infrastructure sector, it increased to 9% in 2016 from the planned budget for 2015. This is in line with the government's long-term plan to encourage multi-year economic base projects. Increased infrastructure spending in the State Budget and Expenditure Plan (RAPBN) is Rp. 346.6 trillion in 2016 and as long as the

position of the private sector and foreign direct investment (FDI) has increased. In total, FDI reached US $ 29.27 billion in 2015, an increase of 2.6% compared to 2014 which was only US $ 28.53 billion. In the infrastructure sector related to FDI it also increased by 9.6% in 2015, while domestic direct investment (DDI) fell by 4%. In the first half of 2016, FDI in the infrastructure sector fell 6.7% compared to the same period in 2015, but this was offset by improvements in other sectors. This means that a number of financial transactions have improved because many infrastructure projects have been closed due to the recovery of this trend.

Efforts to improve infrastructure conditions to reduce the income gap that has a long-term impact on GDP per capita, the infrastructure has a contribution in increasing productivity and economic growth in the long run. Infrastructure plays an important role in advancing economic growth (World Bank Research, 1994). Economic growth is higher in areas with adequate infrastructure, so that several programs can be targeted. Whereas in the medium term it can concentrate on the fundamental changes and connectivity of human resources, and water, electricity, energy, and transportation resources (roads, railways, ports, and airports), also stating that the gap in availability of physical capital and human capital play an important role in promoting economic growth.

Infrastructure development is one of the main factors that contributes to overall economic development, such as investments that can stimulate economic activity, reduce transaction costs and trade costs, and open up employment opportunities. Therefore, the contribution of the infrastructure sector is closely related to investment and returns through increased resources. In addition, that infrastructure development will attract foreign direct investment (FDI) to the country (Estache, 2006; Jones, 2004). While Sahoo, P. (2006). Several South Asian countries that infrastructure is less able to inhibit the impact of FDI growth in Africa (Lumbila, 2005). Based on the above problems, it is necessary to study what drives economic growth and the relationship with the infrastructure and financial sectors in Indonesia.

Literature Review

The research was conducted by Prasetyo and M. Firdaus (2009), which examines the impact of infrastructure on regional economic growth in Indonesia using infrastructure data from 26 provinces using the panel method of fixed effects data. The results obtained indicate that economic growth is affected by infrastructure, such as providing electricity, paving roads and clean water. In addition, production activities are still categorized as employment. This shows that the elasticity of labor is greater than the elasticity of capital. Whereas electricity has the biggest impact on economic growth, followed by paved roads and clean water.

Sahoo and Das (2008), examined the relationship of output and infrastructure in the long run in four South Asian countries including India. The results found that infrastructure development contributed significantly to output growth in South Asia. Furthermore, he also found that by using a data panel using causality analysis, it was found that there was a causality relationship between output and infrastructure development, while the relationship between infrastructure and income per capita had a one-way relationship.

The construction sector has an impact on the development of other sectors of the economic system. The pace of activity in the construction industry sector will accelerate the development of other manufacturing. This is because the industrial sector is a contributor to the construction sector. Some experts also concluded that the relationship between the structure of economic development and economic growth has a different view, but economic development and economic growth are interrelated. The findings also concluded that economic development is the development of industrial sector development, so that the construction industry is caused by long-term economic development (Tse & Raftery, 2001; Chan, S. L, 2001; Wigren, R, & Wilhelmsson, 2007; Ozkan. et al, 2011; Jiang & Jiang, 2007; Lu, X, 2003). Other research also says that in highly developed regions, the construction industry is very weak, but in less developed countries, the construction industry plays an important role in driving economic growth and income (Pietroforte et al., 2000).

Based on the explanation above, several previous studies also examined the relationship of economic growth contributions with other economic sectors, such as agriculture, manufacturing, trade, financial and transportation and communication sectors. Research conducted by M. H. M. Sibrani (2002), found that infrastructure variables had a positive and significant effect on per capita income, while infrastructure variables such as roads and telephones were not substantial. Infrastructure development policies centered on the Java region cause disparities in income per capita in the western part of Indonesia, but cause an increase in each region in Indonesia, especially in the eastern part of Indonesia. R. Yanuar (2006), using panel data of 26 provinces shows that physical capital, road infrastructure and others have a positive influence on economic output. While the results of research by Pereira, A.M. (2001), show that comparative decreases in production will cause scarcity of types of substructures. This means there will be an increase in consumption relative to GDP.

The research of Newbery (2012), shows the results that there is a positive and significant influence between infrastructure, productivity, or growth rates in the long run. Infrastructure investment is sufficient to limit other investments, while excessive infrastructure investment has added value. In another research Y. Wu (1998), using data from several countries, states that there are differences between regions in China with different levels between the Coastal, Central, and Western regions. Meanwhile, , S. Demurger (2001) concluded that the level of openness, infrastructure conditions significantly influence the development of regional

disparities. Calderón et al. (2011), produced a study that positive and significant economic development correlates with the quality of infrastructure in an area.

The exogenous growth model in the slow growth model assumes that economic growth is only influenced by changes in the physical elements of production capital (savings and investment) and labour, while the exogenous variables are considered residual. Labor and capital are assumed to experience a decline in yield if both are studied individually and the returns scale is constant when both are analysed together. Todaro and Smith (2006) and Lopes, et al. (2002), examined the role of economic development in African countries with a sample of 15 countries in the 1980-1993 period. The results of the discussion argue that the construction sector and output variables are growing at the same point only in adverse economic conditions. While economic growth, construction volume, does not grow faster. Furthermore, research conducted by Jackman (2010), Tan (2002), Bon (1992) and Turin (1978), also shows a significant relationship between the construction sector and economic growth. But his research is only in the form of arguments without data support.

The relationship of the financial sector with economic growth shows a two-way causal relationship between financial sector development and per capita income in Botswana in 1972-1995. Furthermore, the results of his research also say that economic growth and financial sector development complement each other (Akinboade, 1998).

The relationship between trade and economic development results in an ambiguous relationship. Because previous research uses the definition that trade is openness, but some experts say that trade is trading volume. Sohn and Lee (2003), Sohn (2006), and Lederman, and Maloney (2003), empirically analyse the relationship construction with trade and economic growth of 60 countries in the world Structure is distinguished by a number of variables, such as excess resources, exports, IITs, and foreign direct investment (FDI), but the results of the study by, Lewer, et al. (2003), which examined trade composition, economic growth using SITC data using the single equation and simultaneous equation methods, support the hypothesis that countries that import most capital goods and consumer goods, tend to grow faster in exports than countries that export capital goods.

In addition, research by Chamhuri et al. (1999), said that the agricultural sector is the main economic sector that contributes to development. Agricultural sector activities are contributing sectors that finance the development of other sectors. De Gregorio and Guidotti (1995), also examined the relationship between the development of the financial sector which leads to an increase in economic growth. The results showed that financial developments varied from all countries. While Jung's (1986), research shows a causal relationship between financial sector development and economic growth in developing countries. This means that

there is a reciprocal relationship between financial sector development and economic growth and vice versa.

Hussein (1999), has examined the relationship between financial liberalisation, financial growth and economic growth in Egypt over the past 29 years, 1967-1996. The method used is the distributed autoregressive lag technique (ARDL). The results showed that an increase in interest rates would affect the financial sector and its impact on increasing economic development. He also found that the financial sector would contribute to an increase in the ratio of credit to the amount of credit and ultimately increase the growth of real GDP per capita in Egypt. However, his research also shows that interest rates have a positive influence on savings.

Galindo et al. (2002), conducted research on positive effects on financial markets such as a more liberal money supply on economic growth in Canada. Furthermore, he also examined whether the economic sector depends on financing expenditure faster than other sectors after financial liberalisation. The results showed that domestic financial liberalisation increased the growth of other sectors in the economic system.

Research from Odhiambo (2004), also argues that there is a causal relationship between financial development and economic growth. This relationship can be grouped into three groups: the first group is the development of the financial sector that controls the real economy sector. The second group says economic growth is driving the development of the financial sector. While the third group produced its findings that the financial sector and economic growth are two-way relations.

Research Methods

The research method was started by using the unit root test, Johansen's cointegration test, autoregressive vector (VAR), Granger cause test in relation to the error correction vector model (VECM), Impulse Response Function (IRF) and variance decomposition (VD).

This study uses time series data, from 1985-2017 obtained from the 2017 World Development Indicator (WDI) CD-Rom from the World Bank and key Indicators from the Asean Development Bank. This research uses GDP, Construction, Finance and Infrastructure variables. All variables are stated in the logarithm and the first differentiation for the data describes the growth rate of each variable.

Unit Roots Test

Some variables are said to be cointegrated or have a long-term relationship if integrated in the same level or in other words not stationary at the level but stationary in the first level difference, I(1). Therefore, the first step is to determine the level of integration for all variables using the Augmented Dickey-Fuller and the Philips and Perron test (Dickey & Fuller, 1979; Philips & Perron, 1988).

Vector Autoregressive (VAR) Test

The VAR model is explained by equation (1):

$$Z_t = A_1 Z_{t-1} + ... + A_p Z_{t-p} + \mu + vt + \varepsilon_t ; 1 \leq t \leq T, \quad (1)$$

where Z_t is the kx1 vector which is an endogenous variable, namely Construction, Finance and Infrastructure and GDP. I (1), A is the approximate parameter and ε_t is the vector error variable μ is a constant vector and v is a trend vector. The optimal amount of lat is determined by the Akaike criteria (AIC) which in turn is used in the cointegration test, the VECM causality test and the Granger (Granger, C.W.J., 1986).

Johansen Cointegration Test

If time sequence data is cointegrated for all variables I(1) or if there is a linear combination between the data. The combination of linear equations as a cointegration or balance of long-term relationships. The VAR equation in equation (1) above can be rewritten as:

$$\Delta Z_t = \prod Z_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta Z_{t-i} + \mu + v_t ; 1 \leq t \leq T \quad (2)$$

Where and Π are the matrix and the parameter k x k is estimated. This is a coefficient that shows the relationship of the matrix of variables in the short run. The long-term relationship is shown by the matrix coefficient Π (number of cointegration vectors).

Johansen's method aims to estimate Π in an unrestricted form and thus test whether we can reject the derived rank Π, in testing the hypothesis $H(r) : \prod = \alpha\beta'$. If each variable has a root unit, it means there is a cointegration relationship between 0 to k-1. The cointegration test uses two statistical tests, namely the likelihood ratio test, known as the trace test and the maximum eigenvalue test. If the test results produce cointegration between the variables tested, this means the long-term relationship between variables.

Vector Error Correction Model (VECM)

VECM is a VAR model that is formed on data that is not stationary or cointegrated. This means there is a long-term cointegration or relationship between the variables studied, which requires the formation of an ECM to test the cause of the variable. VECM is formed by a VAR p-order in the form of a first difference and is called cointegration or error correction term (ECT) which is included as an additional regression. ECT allows short-term and long-term dynamic relationships. In model (3), if Z_t has a cointegrated vector r, then every Z_t will have an ECM indicated by:

$$\Delta Z_t = \alpha\left(\beta' Z_{t-p}\right) + \sum_{i=1}^{p-1} \Gamma_i \Delta Z_{t-i} + \mu + v_t \quad (3)$$

Where α is the error correction coefficient matrix. The first variable is the difference in the first-level lag (Z_{t-i}), which contains information about the short-term causal relationship, while the error rating is indicated by ($\beta' Z_{t-1}$) or obtained from the cointegration vector, and the long-term cause.

The significance of the ECT variable is tested through a t-statistic test to determine whether it rejects the null hypothesis in the existing long-term relationship. The ECT coefficient sign in each equation describes the direction and speed of adjustment for the dependent variable to deviations from the long-term equilibrium represented by the cointegration vector. The negative and significant sign for ECT in the ΔY_t equation reflects a positive response to economic growth leading to fluctuations in endogenous variables. If it is not significant it means that ECT is not aligned towards a long term relationship. The research model that was built to affect economic growth (GDP) is as follows:

$$L(GDP)_t = \alpha_0 + \alpha_1 L(CONS)_t + \alpha_2 L(FINANC)_t + \alpha_3 L(IFRA)_t + \mu_{it} \quad (4)$$

To study the relationship of construction, financial and infrastructure variables to economic growth, the Error Correction Mechanism (ECM) model is used, as follows;

$$\Delta L(GDP)_t = \alpha_0 + \alpha_1 \Delta L(CONS)_t + \alpha_2 \Delta L(FINANC)_t + \alpha_3 \Delta L(INFRA)_t + \mu_{2t-1} \quad (5)$$

Variance Decomposition

Decomposition variance is a variation in endogenous variables against VAR component disturbance. This means describing information about the relative importance of each random innovation that affects variables in VAR. That is, the relative importance of each variable to

explain changes in the rate of growth in future output from the estimated time. This study will measure steps to overcome GDP from changes in standard deviations for each variable.

Results and Discussion

Unit Root Test

Table 1 shows the test results using the Augmented Dickey Fuller (ADF) and Philip Perron (PP) tests on GDP, construction (Cons), finance (Financ) and Infrastructure (Infra) data. It was found that all variables reached stationary at the first difference. This is because the absolute value of statistics τ is greater than the value of kritis-critical which rejects the null hypothesis at the confidence level of 1%, 5% and 10%. This means integration between variables in the first degree or I (1). The τ-statistic ranking value obtained for all time data sequence rejects the null hypothesis, thus it is said that the time series data is not stationary. The findings explain that all time series of variables along the rank/ level are not stationary at the level of confidence, 1%, 5% and 10%. Therefore, all variables studied are stationary in I(1), as shown in the table below.

Table 1: Unit Roots Test, Augmented Dickey Fuller and Phillips Perron

Variable	ADF		PP	
	Level	1st Difference	Level	1st Difference
GDP	4.8178	-6.7717*	-1.1007	-7.6243*
Cons	-1.9348	-4.3327*	2.2941	-3.5346***
Financ	2.0610	-4.5338*	2.4939	-4.5305*
Infra	0.6806	-5.9112*	0.3195	-6.9618*

Note: (*) (**) and (***), indicates the variable stationer on significance level 1%, 5% and 10%.

Cointegration Test

Before testing the Johansen method, it is necessary to ensure that all variables tested need to be integrated at the same level. So that long-term relationships can be seen in one direction or two directions (Johansen S, 1998).

Johansen's Granger Test is used in this study, namely the Trace statistical test and the maximum value of Eigen. If the statistical value for Trace or Eligen Maximum is greater than the critical value at 95% confidence or the probability value is less than 0.01 then the variable is thought to form a long-term relationship. This means that based on the Granger test there is a long-term relationship of the variables studied (Akaike H., 1977).

Based on table 2, the λ-Trace and λ-Max tests show that there is at least one vector cointegrated for estimation using lag 1. This means the null hypothesis, which states, no Granger vector (r = 0) is rejected at the 5% confidence level. These results indicate a long-term balance between GDP, variable construction, finance, and infrastructure.

Table 2: Trace Johansen Statistic Test

Hypothesis Null	Statistic Test (Lag 1)			
	λ - Trace	5%	λ – Max	5%
r = 0	64.2086*	47.8561	41.0064*	27.5843
r ≤ 1	22.2021	29.7971	15.7855	21.1316
r ≤ 2	6.4166	15.4947	6.3419	14.2646
r ≤ 3	0.0748	3.814	0.0749	3.8415

Note: the critical Value derived from Osterwald-Lenum. (1992). (*) indicates a critical value of the refusal, with a level of significant level 5%

Vector Error Correction Model Result (VECM)

The VECM test is used to see the short-term and long-term relationships between variables. Estimated VECM divergence that has experienced the first difference and terma error correction (ECT) which is included as an additional regressor. The significance of the independent variable and ECT to influence the variable was tested through the t-statistic test. This is done to determine whether the null hypothesis is rejected which states there is a relationship or vice versa.

The decision of the VECM test can be shown in Table 3. For the purpose of more stable and consistent budgeting, using lag 1. Based on the decision on the value of ECT generated by exogenous variables, the Construction and Infrastructure variable has a long-term relationship with a confidence level of 10%. This means that exogenous variables rather than Construction, Finance, and Infrastructure variables can stimulate GDP growth in the long run.

The results also found that there was a significant influence of the construction variable on GDP growth at the 10% confidence level in the short term, except for the insignificant finance and infrastructure variables. This means that the exogenous variable construction plays an important role in influencing GDP growth.

Table 3: Vector Error Correction Model Test

Dependent Var (GDP)	Independent Var (Wald Test – F-Statistic)			
	ECT	CONS	FINANC	INFRA
	[0.0523]***	[0.0624]***	[0.2424]	[0.4529]

Note: the values in [ ] is the value of p for the t-test. Sign (*) (**) and (***) are significant at a significant level of 1%, 5% and 10%

Impulse Response Function (IRFS)

The Impulse Response Function (IRF) aims to determine how the dynamic response function applies to each shock to a variation of all the variables studied. Table 4 explains the shock effect given to other variables.

Based on the findings of the response function in table 4, the shock of the construction, financial, and infrastructure sectors will stimulate a decline in GDP, for example, the GDP response due to shocks in the Construction, Finance and Infrastructure sectors. If there are shocks to the construction and GDP variables, they will have an impact on the value of the financial and infrastructure sector in the second period, which are -0.01938 and -0.03119, respectively. Therefore these three sectors appear to have fluctuated for 17 years and reached balance again after the next 17 years. If observed, the GDP response function is more sensitive to shocks in the construction sector than the financial and infrastructure sectors. The conclusions from the results obtained indicate that the effects of shocks vary from GDP, and other exogenous variables. However, all the results of this study are consistent with the results of the VECM test analysis as stated in the previous study of -0.03119.

Table 4: Impulse Response Function (IRFS)

Period	CONS	FINANC	INFRA
1	0.00000	0.00000	0.00000
2	0.01587	-0.01938	-0.03119
4	0.07222	-0.04002	0.00797
6	0.08497	-0.02986	-0.00674
8	0.08592	-0.03441	-0.00317
10	0.08843	-0.03505	-0.00107
12	0.08914	-0.03427	-0.00211
14	0.08908	-0.03453	-0.00198
16	0.08920	-0.03459	-0.00181
17	0.08921	-0.03454	-0.00190
18	0.08925	-0.03453	-0.00188
20	0.08924	-0.03455	-0.00189

The Results of the Decomposition Variance

The effect of decomposition variance, the shaking of exogenous variables influences endogenous variables and provides important information for any random change that applies to variables in VAR using the Choleski decomposition method. Because the cointegration test proves that there is a cointegration relationship between variables, so it can be continued with the decomposition variance and the impulse response test.

The decision from the results of the decomposition variance based on Table 5, found that 100% variation in GDP will be seen in innovations that occur in GDP itself and the future. In the second period, the construction sector explained that 1.19% with economic growth explained only 92.7%. Among the variables tested, economic growth was largely contributed by the infrastructure sector, which is a variation of around 4.6% in economic growth. Furthermore, the financial sector plays an important role in explaining economic growth, which is around 1.8%.

However, after 9 years almost 17.58% of the variation in GDP was still caused by shocks that applied to GDP itself, while the remaining 82.32% was explained by innovations that apply in the variables of construction, finance, and infrastructure. At present construction seems to provide a rather high variation or contribution, which is as much as 70.3% compared to the financial and infrastructure sectors respectively 11.2% and 0.96%. But in the 20th year the same situation applies, where the construction sector continued to contribute as much as 70.3% compared to the financial and infrastructure sectors respectively by 11.2% and 0.96%, but the percentage effect on GDP only gave a variation of around 17.6%.

Therefore, the results of the decision can show that Indonesia's economic growth is largely contributed by the construction sector, which is around 60%, followed by finance and infrastructure respectively at 11.1% and 1.59%. This means that the construction sector plays an important role in explaining future economic growth, but the level of the infrastructure and financial sectors varies. In addition it was added that the development requires the construction industry sector in the long-term economic development (Tse & Raftery, 2001; Chan, S.L., 2001; Wigren, R. & Wilhelmsson, 2007; Ozkan et al., 2011; Jiang & Jiang, 2007; Lu, X., 2003).

Table 5: Decomposition Variance Result

Priod	S.E.	GDP	CONS	FINANC	INFRA
1	0.10748	100.0000	0.000000	0.000000	0.000000
2	0.14541	92.42805	1.19262	1.77699	4.60253
4	0.19989	66.15200	24.20522	5.44108	4.20169
6	0.23783	49.75614	39.60978	7.55033	3.11375
8	0.27298	38.75319	49.79524	9.07351	2.37805
10	0.30547	31.78477	56.54690	9.75846	1.90987
12	0.33879	27.07830	61.10069	10.22393	1.59708
14	0.36212	23.68000	64.37428	10.57430	1.37142
16	0.38745	21.13577	66.83545	10.82621	1.20257
17	0.39952	20.09057	67.84621	10.92991	1.13332
18	0.41124	19.16200	68.74491	11.02134	1.07175
20	0.43372	17.58509	70.26947	11.17821	0.96723

Conclusions

The results of the study concluded that economic growth, was co-integrated with the construction, financial and infrastructure sectors. This implies that the sector's relationship with fast economic development in the long run. The results using the VECM method also show that the construction sector, financial sector and infrastructure sector influence GDP growth in the long run. Therefore, these results can provide opportunities for governments and the private sector to develop and shape strategies to encourage GDP growth.

Meanwhile, an empirical analysis of the relationship between the causes of the short-term Granger explains that the construction sector, financial sector and infrastructure sector are components that contribute to GDP growth. The result of the retaliation function test also shows a different effect from each shock than the GDP ratio and also applies to exogenous variables such as the construction sector, the financial sector and the infrastructure sector. Based on the shock of the construction sector, the financial sector and the infrastructure sector will stimulate a decline in GDP in the last 17 years. Analysis of variance in decomposition also shows the results that the construction sector plays an important role to contribute to economic growth.

Overall, it can be concluded that there is empirical evidence of the influence of the construction sector, financial sector and infrastructure sector on increasing GDP from 1985 to 2017. In addition, this study gives significance to the three sectors that have a strong relationship with each other. So that the financial sector and infrastructure sector, has a relationship with the industrial sector. Because the need for this sector depends on the structure of the industrial sector. In short, the financial sector also plays an important role in

increasing the country's GDP. A solid financial sector placement will attract more foreign investment to invest and transact. This was demonstrated and needed during the economic crisis in mid-July 1997. Therefore, the financial sector as a trigger for improving the country's infrastructure needs to be improved so that development information that will be developed can be realized.

Furthermore, the development of the infrastructure sector is driven by an increase in trading activity. In this connection, they need to become a business sector so that commercial activities run well and consistently. In addition, actions related to the telecommunications industry are also a driving component of the development of this sector. Therefore the role of the private sector plays an important role in promoting the development of this sector. As such, strategies developed by the government need to consider the private sector to promote the construction sector, the financial sector, and the transportation and communication sector. This initiative can be done by providing ease of bank loans and low loan interest rates.

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